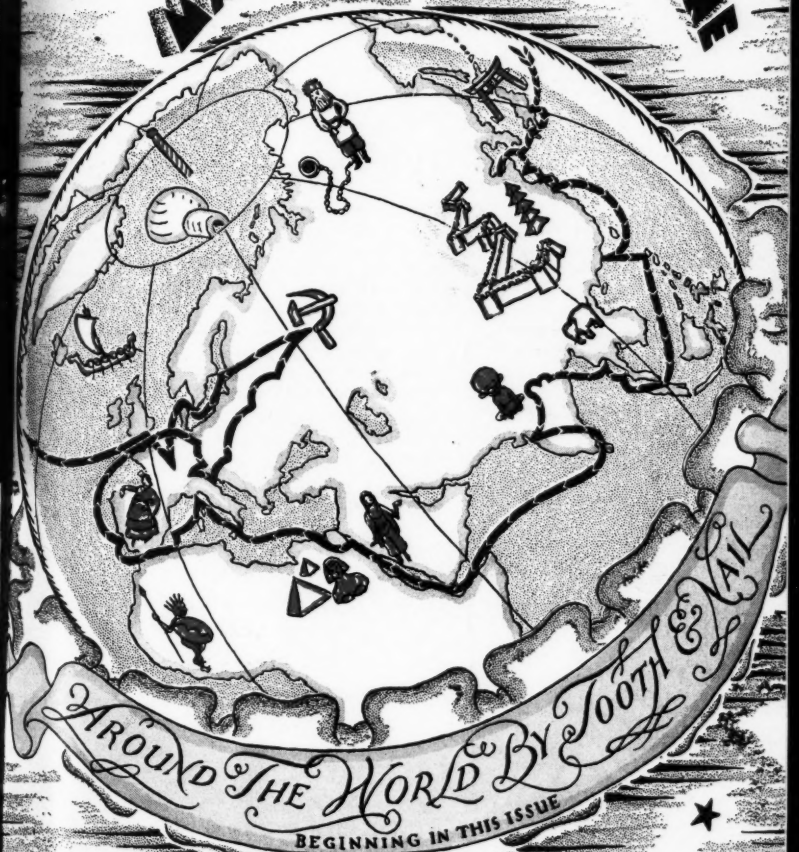


# ORAL SCIENCE

MARCH 1933

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BEGINNING IN THIS ISSUE

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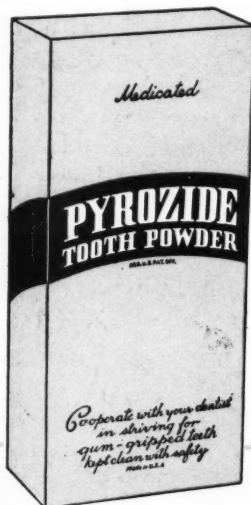
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No. 164

## CORNER

By MASS

THIS afternoon the sight of some surveyors near our house, trudging the hills with their paraphernalia, brought recollection of a big cold jug of lemonade—lemonade satiny as a maiden's cheek because of the raw egg stirred into it—and crisp and flavory home-made cookies, nut-studded home-made cookies with a special and strange and lovely tang. Gone are the days, gone are the cookies—they've vanished down the years along with my lost youth. But even the jaded taste-buds they delighted in the long ago can recall them now, and recapture for a few minutes the joy of those ancient afternoons when this department's eyes glistened at the sight of the loved cookie jar, squatting in a sort of majestic quiet glory upon a kitchen table scrubbed white as an angel's soul. That cookie jar was a little temple to us then and two boys worshipped there.

But completely and entirely and forever, I am afraid, I have forgotten the name of the other boy and what he looked like and the house in which he lived.

Time has blasted him from my memory and blasted, too, the memory of the house that sheltered the cookie jar. That jar still shines in recollection clear and bright—rotund, pale brown, comfortably deep, retaining even when we





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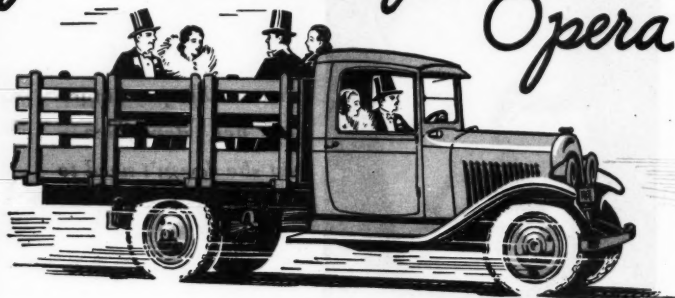
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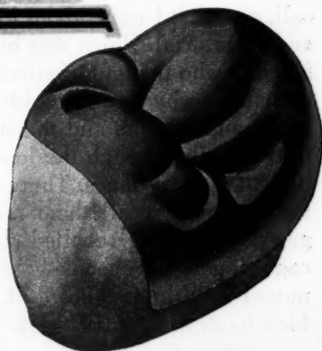
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had robbed it of its last crumb, the lovely special aroma of those cookies; their very spirit lingered there, as a sort of friendly ghost, haunting the jar as a willing hostage—a hostage giving promise of a new generation, another baking.

The other boy had notions of becoming a surveyor, and owned the requisite gadgetry, and books about it. On sultry Summer afternoons we surveyed the hot and dusty countryside—he the surveyor, I the stooge, carrying that stick or whatever it is, with the red disc on it. He squinted at it through the shimmering heat, loudly and importantly and quite needlessly calling numbers which he then wrote down in a gray canvas-covered book. He chanted these numbers to all the world but mine were the only other ears, and I didn't understand, and do not now, and never will.

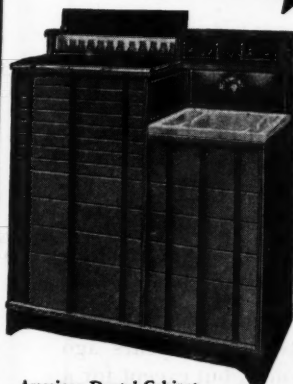
But the sight of that transit and level this afternoon bridged in an instant those thirty years—took me back to my own surveying days, back to the lemonade with egg, back to the cookie jar.

I can't remember liking that boy so well. I seem to recall, now that I write about him, that he was a bit dominant and dictatorial. But it was his mother who made the cookies, and who thought of stirring egg into lemonade. I don't remember why else I would have dragged myself through brush and stickers and the stiff and yellow stubble, why I trod wearily through the loose and hot and powdery gray dust of country lanes. There may have been other reasons, but I cannot recall them now. In those days, before my gastric plumbing rebelled, I would have invaded a lion's cage to get at a chocolate layer cake, especially with walnuts. I would do so now—if I were sure the lion had soda bicarb. on his pantry shelf.

But I know the humid hours I put in as stooge to that amateur surveyor were given in no spirit of devotion to engineering, or mathematics, or whatever it is that surveying is all about. I never knew and I never cared.

I seem to remember that the boy used to talk to me at

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D3-35

length about it, and stop on the road to explain, drawing diagrams in the soft dust with a stick. But I am certain I never really listened, although I may have looked attentive, even enthralled. But any such look as he saw in my eyes went no deeper than their pupils; back of them, in my mind, I would have been thinking about the cookies and about the lemonade.

And today, now, this very minute, if you were to try to explain anything of the sort to me, I would still look as knowing and as attentive, but back in my mind I would be thinking that you needed a shave, or that I liked your necktie, or wondering how I was going to find time tonight to wash our dog Ignatz.

For the nearly nineteen years I have been on ORAL HYGIENE I have been exposed to no end of information about dentistry, but nothing in any way mechanical has been understood, at least not very well.

I learned to drive a car nearly twenty-five years ago and have driven a great deal, and do now, but except for a few simple principles I know virtually nothing of automotive mechanism.

For many hours in many years I have sat before this Corona typewriter, or ones like it. The ribbon device is the only thing that ever gets out of order, but when it does—although it has functioned ten inches from my nose for long years—I haven't the most remote idea what to do about it other than to curse it bitterly through clenched teeth, and pull and tug and bang until young Mass comes along, bends something, and tightens a little screw with his penknife.

I don't know anything about surveying, or the mechanics of dentistry, or automotive mechanism, or typewriter ribbon devices.

Somewhere in all this there is a life lesson, but I don't know what that is either.

I only know about cookies baked in the long ago—cookies with nuts.

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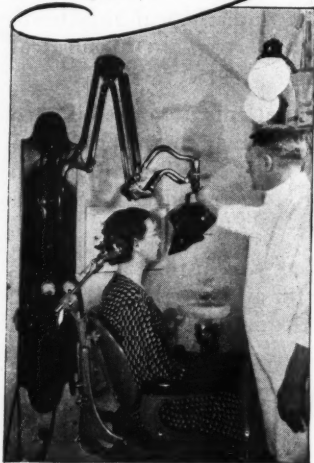
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Rea Proctor McGee, D.D.S., M.D., *Editor Emeritus*

March  
1935



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"That's My Collar Button".....	<i>Joseph H. Steele, D.D.S.</i>	334
Around the World by "Tooth and Nail"	<i>H. M. Phillips, D.D.S., B.S.</i>	336
Daily Reflections of a Small Town Dentist.....		340
A Dietary Dentist Speaks.....	<i>Ernest Day Rush, D.D.S.</i>	342
Modern Dental Practice.....		346
What Insurance is Vital? The Problem of Old Age		
Income—Part IV.....	<i>T. J. Byrne, Jr.</i>	348
The Role of Tonsils in Tooth Conservation	<i>Fassett Edwards, M.D.</i>	355
Analysis of ORAL HYGIENE's Health Insurance Poll .....		367
Editorial .....		368
Dear Oral Hygiene.....		373
Ask Oral Hygiene.....		376
The Dental Compass .....		382

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MARCH, 1935

333

# *"That's* **MY COLLAR BUTTON"**

By JOSEPH H. STELE, D.D.S.

MANY of us, no doubt, will recognize the title as the catch line of a certain dental joke going the rounds. It is this: The dentist is preparing a cavity and exclaims, "Aha, I see gold!" Whereupon the patient replies, "That's not gold you see. Ha, Ha! That's my collar button." Readers or hearers of this little story are supposed to be convulsed with laughter. I pride myself with being the possessor of a fair sense of humor. Despite the fact that I have heard this story repeatedly, I still fail to see it in any light except that of a slur on my profession. On inquiry I have found a number of colleagues who do not see the humor in this or any expression which slights the dentist. Yet, we seem to accept remarks like these without protesting or endeavoring to put a stop to them.

From time immemorial, a jibe, spoken or printed, at the expense of an individual or group, has always evoked a great deal of merriment from any audience. In the jargon of

the show-people, it is always good for a "belly laugh." It can be proved psychologically that a small percentage of the audience will consider the remark seriously and even form an opinion from it. This opinion may be detrimental and possibly prove dangerous. More often than not, a quick thinking master of repartee can, in some instances, turn the quip about so that it acts as a boomerang. This only holds good when an individual is affected and the mode of expression is oral. The group is helpless unless it has a competent and ever-present leader to make replies. All printed remarks, on the other hand, have to go unanswered unless one resorts to the extreme measure—a libel suit.

It is of the group that I write, our group—the members of the dental profession. For years now, we have been pumelled by supposedly humorous expressions, phrases, verses, cartoons and stories. We have endured these as good-naturedly as possible. Some have hurt to the quick. They have hurt



us individually and collectively. Yet, we have taken them all sportingly. We have joined in the laughter and perhaps even invented some jokes ourselves. We cannot deny the fact that

we merited them. At one time the percentage of quacks, charlatans, and other unscrupulous persons in our profession was unusually high. The public, ever

(Continued on page 360)

# *Around the World*

## BY TOOTH AND NAIL

By H. M. PHILLIPS, D.D.S., B.S.

**F**OUR hours before my wife and I left Chicago on our world adventure, your editor surprised me with the commission of foreign correspondent for ORAL HYGIENE. He believes that you will be interested in following us as we work our way around the globe, and will be willing to listen to my amateur review of dental practices the world over.

The geographical feat to which we aspire involves thirty-five thousand miles of land and water, taking us across the borders of twenty-five countries, and providing, in the realm of time, at least six months of education and romance. Being a recent graduate of Northwestern University Dental School, I will work as an itinerant with forceps and drill; my wife, a high school teacher, a self-instructed manicurist, will beautify all comers willingly. Thus we will etch the honeymoon epic of our lives "by tooth and nail."

Early in life I developed the



*Doctor and Mrs. H. M. Phillips*

MARCH, 1935



habit of celebrating convocations with trips. As soon as I am told that another milestone has been passed and that new responsibilities are mine, I succumb to the urge of my roving spirit. After high school I toured Europe on a motorcycle. The college milestone marked for me the beginning of a five thousand mile hitch-hike through the United States, which I supplemented by working my way through the Panama Canal on a tramp freighter. My present nomadic state was brought on by hard years at dental school. On this trip I have the asset of a wife who is, although uncalloused by the knocks of earlier travels, a brave and willing companion. Being the only woman on the ship, her adaptability will soon have the salty tests of life aboard a freighter on the high seas. Both ecstasy and depression are in store for her. We must both be true vagabonds, for even the threat of financial insolvency has not daunted us.

After committing ourselves to the far too extravagant ambition of a world-spanning honeymoon, plans for its realization became indispensable to our peace. The question "When do you start?" rained on us from all sides, and made the thought of staying at home impossible. While waiting for the November State Board Examination, our seeking minds

invented and exploited every conceivable travel opportunity. To shipping companies we volunteered our questionable talents as entertainers in exchange for a world cruise. We offered our services as tutors, guides, chaperones, companions, attendants, linguists, interpreters, secretaries, musicians, and as nursemaid and private dentist. We showered publications with our offer to narrate adventures as traveling scribes. We deluged dental manufacturers with the suggestion that we contact foreign lands for them in a business capacity, offering to carry displays and illustrated literature. We almost got in jail by innocently but unlawfully trying to sell our duty-free shopping privilege to importers. We acquainted ourselves with the unadvertised and cheap passenger rates of freighting companies and then advertised as touring agents.

#### HARVEST OF REGRETS

In the harvest days following our host of efforts, we were smothered by a tidal wave of courteous regrets and rejections. Sad days they were as our prospects dwindled. Everybody was interested but nobody was susceptible. However, the experience was not without its enlightenment, for contained in the thirty-five informative regrets from the dental manufacturers we feel that we have



*Doctor and Mrs. H. M. Phillips shown with their wheelbarrow suitcase on San Francisco dock before sailing.*

a survey of the inhibitions that are paralyzing international business relations.

Not cowed by accumulated defeats, we reasoned that one must eat, sleep, and serve wherever he may be, so why not on the road? The Orient cries for American dentistry. Ships should support a dentist. If we could but raise the ante to cover the minimal basic transportation, our start would be guaranteed.

The subsequent period was devoted to intensive shopping for basic rates. By driving a car to the coast for a finance company, then by using a freight boat in the Pacific, and by juggling exchange rates in foreign currency, we found it

possible to arrange transportation from Chicago to Chicago for \$295 apiece. So now, as I punch out this letter to you, the S. S. *Golden Sun*, our Pacific ark of deliverance, is being prepared for its long plow to Yokohama and all points Oriental.

Once out to sea, my wife and I will try to invoke the good will of the all-powerful master of our ship in order that we may practice our art and science on the boat. I am carrying dental equipment which has been contributed from many sources. Most burdensome, but most useful is my foot-engine given me by Doctor F. B. Noyes. In two fishing tackle boxes I have forceps and anesthetics; foil, amalgam, and cement for filling; scalers for prophylaxis. Doing dental operations to the rhythm of the sea will be novel. My wife carries such seductive shades of nail polish as "flesh," "nude," and "dawn," to intrigue the vain and fastidious. Our blackest fear is the captain's veto; our brightest hope, his adoption of compulsory insurance of health and beauty. Somewhere between these extremes hangs our fate.

#### SHIFTING BAGGAGE

Cheap transportation and a work-as-you-go plan were not our only economy innovations. Contending that wheels should

carry the burdens of men we equipped one end of our trunk-suitcase with an axle and wheels; the other, with a sturdy handle. By piling the bulk of our luggage on the suitcase over the wheels and lifting the handle, we have in effect a wheelbarrow. In addition to being a labor-saving device, our contraption is designed to avoid tips. This is our adaptation of the principle of "free wheeling." It takes years of training to become an economist but only intestinal fortitude to become an economizer.

More important to us than our passport is our invaluable leather-bound scrapbook which contains letters of introduction from prominent men and from three notable universities carrying their impressive seals. Pictures and clippings of articles previously printed add endorsement to our credentials. Conspicuously placed in our cherished book is my letter from ORAL HYGIENE commending me to all courtesies. One page, entitled "A Democracy of Friends," is reserved for the signatures of all who contribute advice or courtesy to our venture. The book may prove to be a wedge or lever to help us gain sight-seeing privileges not extended to most tourists. Even if we have overestimated its usefulness, it may some day be a record for our grandchildren

of an old-fashioned way of touring the world.

Before telling you just where we are going your correspondent feels it necessary to warn you and also himself of his prejudices, which, incidentally, would be yours also if we exchanged places. For us in America, dentistry has grown up as part of our American culture, and we are naturally heir to many preconceptions, the rightness and wrongness of which have never been internationally determined. We have, caked in our thinking, opinions by which the habits of other countries might seem ludicrous and silly. However, before ridiculing, the religions, beliefs, and customs of a country should be considered. In every country we may anticipate that dentistry will be only one of many institutions shaped by their time-honored traditions which help to form the fabric of their current culture. Thinking and understanding internationally, inter-racially, inter-denominationally will be our greatest problem.

Another temptation which is a pitfall to the world traveler is his irresistible tendency to reduce all sights and phenomena to general terms. The similarity of the problems that all peoples of the world are busy solving permeates our minds. In our temporarily distorted

(Continued on page 364)

# Daily Reflections

## From the Daybook of a Small Town Dentist

### PART II

#### SATURDAY

Last night I extracted an aching tooth for Jimmy Fox, an undernourished boy of 15. He told me through tears of pain that he had no money. He is one of eight children. This morning, in spite of my protests, Jimmy smilingly paid twenty-five cents on his account. I wonder if some of my friends in the cities are collecting 25 per cent of their fees?

■ ■ ■

#### SUNDAY

Had a most enjoyable horseback ride this afternoon, and it didn't cost two dollars an hour. The horse wasn't an old plug, and the ride wasn't over a narrow bridle path, the air about which is usually supersaturated with gasoline fumes. I must ask Doctor Harshman if he does skin grafts. It is a pleasure sometimes to work standing up.

■ ■ ■

#### MONDAY

Quoted Mrs. Eggleston a price of \$12.50 to rebase her lower denture. As would be expected she made a beautiful power dive to the ceiling.

"Well, Mrs. Eggleston," I explained, "suppose your plate only lasts a year. It will probably last much longer, but suppose it doesn't. The cost would only be a little less than one cent per meal to eat in comfort. If you had your natural teeth do you have any idea what your tooth paste bill would be for a year?" She didn't. Neither did I. She decided to take the plate. Sometimes I feel just like Jesse James; that is, the way he felt when he wanted to commit a murder and not a robbery.

■ ■ ■

#### TUESDAY

Word has just reached my office that our efficient basket ball coach, a fine young man of twenty-three, told his health class that it was a sad, grave mistake to have their teeth cleaned; that it was injurious to the enamel. "Oh, Death, where is thy sting?"

■ ■ ■

#### WEDNESDAY

The man who *had* me extract a central that was in the first stage of an acute infection was in this morning—alive.



Said the pain was terrific for a few hours after extraction, but gradually subsided and now he seems O. K. The lady for whom I had inserted a silicate in an undersized lower lateral without the cement intermediate, also called. She, too, was comfortable.

The first operation was against my better judgment—the second, just plain laziness. Some day, in the crowded court room, when the Judge finds for the plaintiff, and

starts the verdict by saying, "Because, doctor, you did not exercise reasonable care and judgment etc. etc.,"—I suppose I'll learn better. Do any of the rest of you ever do anything wrong when you know better?

■ ■ ■

#### THURSDAY

Sick.

■ ■ ■

#### FRIDAY (In the hospital.)

As Dorothy Parker says,

(Continued on page 359)

# A

## Dietary Dentist Speaks

By ERNEST DAY RUSH, D.D.S.

"**D**OCTOR, are you going to give a speech?" Here is one to try out on your parent-teacher group!

Four things make our teeth efficient: heredity, chemistry, glands, exercise. We must not be like the blind man examining the elephant. An elephant is not a rope, a snake, or a wall. Neither is mouth health dependent on one factor, but on all four.

Heredity comes first—at least in time. Here in America, the melting-pot, we are given the best chance in the world to observe the teeth of people of all nations, and to note the influence of intermarriage on the children's teeth. People from some countries have good teeth, others have poor; even classes in the same country will differ. When these healthy immigrants come to us, what happens? Dental deterioration sets in almost at once. That rarest of treasures, a perfect set of teeth, suddenly begins to show decay. Now what about their children? They inherit the good teeth of their parents; but before they are old enough to vote, their teeth have begun to go bad.

Suppose Hugo Ehrenbradt marries Marie Doumergue. Their little Marie inherits from her mamma a small, narrow French jaw, but from her father such broad Saxon teeth that there just isn't room for all those teeth to line up as they should.

If it seems that we have little control over heredity, in our struggle to achieve perfect teeth, we certainly do have control over the second factor—food chemistry. All of us know that careless eating can cause stomachaches, headaches, and other distress; but few of us know that thoughtless eating will fill even good teeth full of holes. A poorly balanced diet always starts trouble, even cavities and pyorrhea.



*Suppose Hugo Ehrenbradt marries Marie Doumergue... the Eskimo... chews on the hide... the Mexican Indians use corn...*

Does this sound fantastic—like the ravings of an alarmist? Let's see. Many of us like orange juice and toast at breakfast. We probably know that the starch in the toast begins at once to be digested by the saliva; but many of us do not know that the citric acid of our orange juice entirely arrests that digestive process in our stomachs. Then, by inevitable cause and effect, the acid system thus produced gradually softens the lime in our teeth, and encourages and even hastens decay, pyorrhea, and the whole brood of dental agonies. This is only one example of the effects of an unbalanced diet. But besides regulating our acids and alkalies so they will not fight each other, we need also to balance our fats,



starches, and proteins, and even our eleven important minerals and six vitamins. There are thirty-seven elements needed for a complete diet; yet no one need be alarmed or discouraged. A few simple, common-sense rules, to be given a little later, will make easy the use of a menu that is from every point of view all that it should be.

So much, very sketchily, for what we all need to remember about how heredity and chemistry can insure good teeth. But right here chemistry has a still stronger connection. Our diet must bring us the minerals that are vital to our well-being. These minerals determine the quality of the blood. The blood chemistry controls the activity of those mysterious organs called glands; and the glands have a major influence on the shape, the hardness, and the color of our teeth.

#### VALUE OF EXERCISE

Heredity, then, is difficult to control. Diet is easy to control. Even the glands can be strongly influenced through diet. But what has "exercise" to do with mouth health? The word here, of course, means exercise of the teeth and jaws. Now it happens that in centers of civilization, where our foods often lack the vital minerals, and also require too little chewing, we suffer from lack of dental exercise. But the Eskimo, after the kill, doesn't stop with chewing his meat raw—which is in itself good exercise—but he chews on the hide until it gets soft and pliable. That is how the Eskimo tans his hides—with his teeth! When his clothes get wet in the sea water, they dry stiff as a board, and the chewing process must be repeated. Teeth in the Arctic are powerful tools used for many purposes. They must withstand tremendous pressure, crushing forces up to four hundred pounds to the square inch.

Our neighbors, the Mexican Indians, especially those up in the hills, use corn that is poorly ground. The cakes fried from this coarse meal, therefore, take a great deal of mastication. Chewing these "tortias" is about all the work a Mexican feels able to do. Now what happens to the peon who cracks a tooth on a piece of gravel? Right away he gets into the habit of chewing on the other side of his mouth. Years later, his teeth are examined by an American dentist in Mexico on a hunting trip. On the side where no hard chewing has been done, the teeth are stained, tartar-covered, loose, and decayed. But on the other side, in the same mouth, the teeth are fit: clean and firm—without lime deposit, pyorrhea or cavities—for exercise strengthens the gums, cleans the teeth, and prevents cavities.

These, then, are the four great factors that determine healthy teeth: heredity, diet, glands, exercise. Food chemistry, glandular function, and muscular exercise are easy to manage; but heredity has up to this time submitted to no human control.

#### RULES FOR DIET

Finally, then, we are ready for the promised rules for a simple, common-sense diet. Remember that these rules are not for lumberjacks, but for ordinary persons like you and me, who spend most of our lives indoors. They should be put into operation gradually. Here they are:

1. Eat more of the highly colored vegetables: carrots, beets, greens, radishes. These are protective foods, rich in the vitamins that build a healthy, beautiful skin.
2. Eat fewer rich foods, like cakes and preserves. They stimulate without building.
3. Eat fewer canned foods and warmed-over vegetables. Much cooking has devitalized them and destroyed their vitamins.
4. Eat natural sugars like honey, sorghum, maple syrup, and brown sugar for the greatest net gain in health and energy.
5. Eat proteins and fats—preferably at night: meats, fowl, eggs, cheese, fish, nuts, butter, olive oil. Along with these foods eat the non-starchy foods: greens, citrus fruits, salads, tomatoes, buttermilk. Vary the meats. Eat more liver, heart, brains, pigs' feet, and gelatin. When you treat yourself to a steak, eat the fat along with the lean. But don't eat meat at all unless you are hungry!
6. Eat starches and sugars at breakfast time: that is, bread, toast, French toast, waffles, buckwheat cakes, honey, sorghum, and maple syrup.
7. For lunch eat fruits and nuts, or—despite common belief—combine citrus fruits and milk.
8. Eat sweet fruits and melons by themselves.
9. Eat more sea foods and fish-liver oils during winter and spring: for milk during these seasons lacks sunshine—therefore is "short" in resistance-building vitamin "D".
10. Combine green vegetables with anything at any time.

# MODERN Dental Practice

*Are you familiar with it?*

*What's wrong in these  
PICTURES?*





*After you've written  
the correct answers  
look on PAGE 363  
because your  
answers are  
WRONG*

# What Insurance is VITAL?

By THOMAS J. BYRNE, JR.

## PART IV

PROFESSOR S. S. Huebner<sup>1</sup> of the University of Pennsylvania has pointed out that the life insurance companies apply the law of averages to investments in seven distinct ways. He states that, "The proper application of averages constitutes the greatest safeguard in the realm of investments. Yet the average individual can at best meet but one of the seven necessary applications; namely, a diversified number of investments, while few depository institutions can comply with more than two or three. But legal reserve life insurance uses all seven applications, and thus makes the strength of its investment portfolio synonymous with the economic strength of the nation. Briefly stated, the seven applications of averages are:

<sup>1</sup>Huebner, S. S.: Dependable Security of Legal Reserve Life Insurance as a Depository Institution, Hartford, Connecticut, Financial Independence Committee. pp. 8-14, 1933.

"(1) *Diversification Over all the Economic Interests of the Nation.* The \$21,000,000,000 portfolio of life insurance companies is spread in reasonable proportions over first mortgages on farm properties (8.8 per cent), first mortgages on city properties (27.5 per cent), first mortgage railroad bonds (15.1 per cent), first mortgage public utility bonds (8.7 per cent), first mortgage industrial bonds (1.8 per cent), government bonds (8.4 per cent), stocks (2.7 per cent), real estate (4 per cent), cash and other admitted assets (4.5 per cent), and policy loans, secured by the diversified portfolio itself, (18.4 per cent). Emphasis is on first liens almost entirely and with an adequate margin of safety. Moreover, the proportion of assets in any one type of business interest is relatively such as to protect the portfolio as a whole against severe shock in any particular field of endeavor.

### ANNUITY FIGURES

A dentist must retire voluntarily or involuntarily much earlier in life than most men. If he starts at 35 to deposit \$25 per month regularly in a retirement annuity, he can secure at 65 an income of \$140 per month, which will be guaranteed to last for the rest of his life. This contract amounts to a savings account with a life insurance company. This savings account may be cashed in at any time; but if the policyholder wishes he may take in lieu of cash a monthly income guaranteed to last as long as he lives.

"(2) *Diversification Geographically.* The portfolio of the average life insurance company is distributed far and wide throughout the nation. Approximately 38 per cent of life insurance assets have been placed along the Atlantic Coast from Maine to Florida, about 47 per cent throughout the Ohio, Missouri, and Mississippi basins, about 10 per cent in the Pacific Coast region, and 6 per cent in Canada and the territories of the United States. Economic convulsions do not occur with equal severity in all sections of the country, and life insurance thus again benefits from a national average.

"(3) *Diversification by Sheer Number of Investments.* Life insurance companies number their investments by the thousands. A very large number have from ten to twenty thousand different investments, and some many more. Most policyholders will find their cash values (their life insur-

ance investment) scattered over thousands of investments to the extent of just a few dollars or a few cents in each investment. Moreover, each premium paid is immediately and automatically spread over the entire range of the company's investments. The policyholder, it should be emphasized, is protected by the company's collective portfolio, and not by any limited list of ear-marked securities. To the extent of his cash value, he owns a cross-section of the company's entire investment portfolio, which the company agrees to buy from him at a stated price should he wish to withdraw, or to accept as collateral for a loan in case he should wish to borrow. Mistakes are made, of course, from time to time, but the very number of investments made is sure to cause losses in such instances to be neutralized by gains in other directions.

"(4) *Diversification by Maturities.* Current pressure

by way of surrenders and policy loans is largely met by current cash income from maturing real estate mortgages and corporation bonds. Even during 1931, the worst year of pressure during the present convulsion, life insurance companies as a rule met about eighty per cent of their surrender and policy loan obligations with the cash realized from current maturities. In addition, they had available for this purpose the premium income as well as the investment income from their portfolios. Very few companies, indeed, have been obliged to sell any securities to meet current pressure.

"(5) *Diversification with Respect to the Time of Purchase.* The life insurance portfolio is created over a generation, and not within a year or two. Investments are made during favorable buying periods like 1893-97, 1903-04, 1907-08, 1914-15, 1920-26, and 1930-33, and not only during more normal times. The purchase price of the portfolio is the average for all the years over which purchases were made. The solvency of a life insurance company may not be measured by prices prevailing at any particular time.

"(6) *Diversification of Clients Geographically.* The clients of life insurance com-

panies are scattered nationally, and are not confined to one locality. There are therefore no 'runs,' the great dread of local depository institutions. Runs are local, and not state or United States. There may be "pressure," it is true, but that pressure is gradual. It may be discounted, and may be met by current maturities, as well as by premium and investment income. Immediate liquidity is, therefore, a secondary consideration with life insurance companies. The life insurance company is well fortified for the present, and is not dependent upon 'liquidation values.' It may wait until the storm blows over.

"(7) *Selective Average.* The aforementioned six applications are fortified additionally by a careful scrutiny of all investments by competent investment managements, actuated by the principles of trusteeship. Averages can be of little avail, if all of a list of ten thousand investments are no good. Careful selection of each investment, and careful watching of the portfolio thereafter, are a prime necessity. That service is assured to the policyholder. Emphasis is placed upon obligations, the first lien principle, and an adequate margin of security. The investment managements of life insurance companies are paid by salary. They have no private axe to grind.



They buy for income and not for speculation. They are naturally inclined to be severe in their selective attitude, and are not prone to be influenced by the ballyhoo campaigns that play such havoc periodically with the general investment public. Moreover, legal reserve life insurance is founded upon the scientific mathematical approach, all premium computations being based upon extraordinarily conservative assumptions with respect to mortality and interest earnings, thus again furnishing another important factor of safety.

"Owing to the aforementioned applications of averages, the life insurance investing public may face the future unafraid, irrespective of recurring business convulsions. They may place entire confidence, from the long range point of view, in their purchases of guaranteed income, endowment and annuity contracts. During the past three years, as severe depression years as this nation has ever known, life insurance assets have increased by approximately \$3,000,000,000, or by about \$1,000,000,000 for each of the three years. What other depository investment institution may be pointed to with such a record during the present convulsion?"

Another advantage of the life insurance savings plan over other savings plans is the fact

that any loss sustained on an individual investment is spread over all the policyholders of the company instead of being borne solely by the man who happened to own that particular investment. Perish the thought that the life insurance savings plans bear any resemblance, however remote, to the "investment trusts" of evil memory. Nevertheless, the trust idea of *spread of risk* is inherent in both and the idea itself is good.

#### LIFE INCOME

Finally, the peculiar advantage of the life insurance saving plans is the fact that at maturity of the plan, when the fund has been accumulated, the policyholder may secure, if he wishes, an income guaranteed to last as long as he lives. This sort of guarantee is not available in connection with any other kind of investment. Stocks, bonds, mortgages, real estate, and other forms of property—all provide the owner with an interest income more or less stable but, if the interest income is not sufficient and one bites into the principal to eke out the income, this immediately cuts down the interest yield, requiring further raids on the principal, arousing the terrible fear that a man may outlive his principal, which fear is sometimes realized. In life insurance saving plans, in which

the income for life is selected by the policyholder in lieu of the lump sum, the life income (known as an annuity) is guaranteed to last as long as the policyholder lasts. Even though the policyholder may live to be old as Methuselah and his income payments amount to twice or thrice the amount of the lump sum purchase price, still the insurance company must mail him his check on the first of each month as regularly as clockwork.

In general, we feel it is advisable for a policyholder to take the proceeds of his savings policy in the form of an annuity (life income) instead of in cash, unless the amount of cash is much too small to provide an income worth anything.

For those of us who have been fortunate enough to salvage something from the wreck of the good ship *Fortune*, Anno Domini 1929, be it said that annuities (life income) may be purchased by lump sum payments of \$1,000 or over, the amount of life income depending on the age of the annuitant. The amounts of life income purchasable by such a cash payment are not quite as attractive as the amounts purchasable by the accumulated funds of the saving plans we have described. The amounts, however, are attractive enough to have caused annuity sales in the United States to have more

than doubled since the starry days of 1929.

Whether they are bought outright with your own cash or with cash accumulated in life insurance saving plans, annuities are in general of two kinds: plain annuities and refund annuities. In a plain annuity the purchaser of the annuity "shoots the works;" that is, he turns over his purchase price to the insurance company and the insurance company agrees to give him a fairly large income for the rest of his life, that income to cease on his death and the insurance company to retain any unused portion of the purchase price. In the refund annuity, the purchaser agrees to accept a somewhat smaller life income in consideration of the insurance company's agreeing to pay over to his heirs on his death any portion of the purchase price not already used up in life income payments. In general, the plain income is used by persons without dependents or persons whose dependents have independent means of support. The refund annuity is more popular with the ordinary person who has dependents.

You will recall we mentioned early in this article that there are in general two kinds of savings plans sold by life insurance companies. One kind is sold in a separate policy called a retirement annuity. In

the other kind the saving feature is included in a life insurance policy which, because of that fact, carries a high rate. Ordinarily we think it is more to the advantage of the policyholder to carry his savings plan in a separate policy, a retirement annuity. Where the savings feature is carried in conjunction with life insurance in the same policy, if the policyholder dies before the maturity of his savings plan, all he collects is the life insurance face of his policy. In other words, all his extra premiums for the savings feature of his policy have been wasted—*forfeited* to the insurance company. If he carried his savings plan in one policy and his life insurance in a separate policy, his estate would receive, on his death, not only the face of his life insurance policy, but the premiums he had paid in on his saving policy.

It is interesting to note that where the savings plan is issued in a separate policy, no medical examination is required. This sort of contract is, therefore, frequently used as a kind of a substitute for life insurance where a man is physically ineligible for life insurance. These separate retirement annuity policies (saving plans) provide that the policyholders shall have the right to convert the contract to a life insurance policy on evidence of insura-

bility, so that if a man, ineligible for life insurance, were to take out a retirement annuity contract, he could later, if he recovered from his impairment, convert his retirement annuity contract into a life insurance policy if he wished.

Dentists sometimes say that it is difficult for them to tie themselves up with a regular monthly or quarterly payment to an insurance company for annuities. They state that their income is so variable that they find it difficult to meet fixed obligations, which must be paid promptly. Of course, if this were entirely true, no dentist could sign a lease, for by doing so he obligates himself to pay monthly rent. However, the objection carries some weight. It is for this reason that insurance companies permit thirty days of grace in paying premiums. If this grace period is not enough leeway the payment may be skipped and made up later with 6 per cent interest. Similarly, if a man has a particularly good month, he can, if he wishes, make a larger annuity payment than usual, in this way prepaying some future premiums which he may wish to skip later.

It is astonishing to note how many old people are dependent on others in their old age despite the natural human aversion to a dependent status. At

40, one out of every four persons is supporting a parent. At 65, at least three out of every four persons are dependent on others for support. For an elderly person who has been used to making his own way in the world, being master of his own destiny, and maker of his own decisions, it is one of the most difficult things in life to become suddenly dependent on a child or other relative; to become overnight a person de-

pendent on the will or whimsy of others, stripped of the power of acting independently and on one's own initiative. All too often this bitter cup has been drunk to sour the closing years of a life which with a little foresight could have ended in sweet harmony. To avoid this anticlimactic epilogue to our own lives should be the ambition of every straight-thinking man.

175 West Jackson Boulevard  
Chicago, Illinois

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### NOTICE

Our attention has been called to the fact that Ellis R. Goldberg, D.D.S., Philadelphia, Pennsylvania, in the January 24 and January 31, 1935, issues of the *North Philadelphia Globe*, made unauthorized use of material from the series of articles by Doctor Howard R. Raper, which appeared recently in *ORAL HYGIENE*. Doctor Goldberg and the publisher of the paper have been formally notified that this is a violation of the copyright law.

This statement is made so that the dentists of Philadelphia and vicinity will know that Doctor Goldberg used this material without our knowledge or consent.

# *The Role of Tonsils in*

## TOOTH CONSERVATION

By FASSETT EDWARDS, M.D.

IN this article I will concern myself chiefly with the relationship of the teeth to the lymphoid masses in the human throat commonly known as tonsils. There are various kinds of tonsils, and perhaps it might be well to make the distinction rather clear before going further.

The common, well-known masses seen in the throats of young persons, chiefly at the sides of the base of the tongue, are the palatine tonsils; whereas those ordinarily called adenoids, are properly, or scientifically, if you like, known as pharyngeal tonsils. Furthermore, there are smaller masses of this same lymphoid material called lingual tonsils, which form a rude semi-circle about the base of the tongue, well back—and usually, due to their location, hard to see. The tongue, proverbially unruly, tends to hump itself when being examined and thereby to conceal the tiny, flat tonsils on its posterior aspect. Of course,

with skill and patience, they may be inspected. To be sure, tonsils (particularly palatine) are often to be found in older persons but such tonsils are always in a pathologic state and are left out of this discussion.

Repeated infections, frequent colds, dietary disturbances, endocrine malfunctions, and various toxemias—all tend to cause an increase in the size of tonsils of all kinds. Yet rather generally this increase in size tends to occur without any manifest infection of the tonsillar bodies. Now this gives one an idea, and permits of a logical deduction, that the increase in size is due to an increase in work; in other words, that the possible function of these lymphoid masses is that of active protection against the deleterious effects of the colds, the dietary indiscretions, endocrine upsets, and toxemias that plague us. Moreover, there is, in my opinion, another and perhaps additional or supplementary function, of which more later. Without a

doubt this protection occurs in a complex, multiphase form; but, in the main, it would appear to be designed to protect us against bacterial action. To my mind, there seems to be no other logical conclusion to form, in the light of our confessedly inadequate knowledge of today. Often we see huge palatine tonsils that show not the least macroscopic evidence of disease. Nor is there clinical evidence of disease elsewhere in the body. Apparently what we see are large but entirely healthy tonsils in a healthy body.

Ordinarily in a normal throat these tonsillar bodies will disappear completely by the time of attainment of full adult growth—say, about the age of twenty-five years; hence one might be justified in assigning to the tonsillar bodies some as yet unknown part of the function of bodily growth. This is the second tonsillar function hinted at in the foregoing paragraph. For a long time it has not been possible for me to escape that conviction—that they must be connected with growth, either as cause or effect.

#### HYPERTROPHY

There is a condition known as familial hypertrophy of the tonsils: it occurs in all or nearly all the members of a certain family, and in this pathologic state there is usually to be

found caries of the teeth. Now, as concerns the dental profession, what is the etiology of the carious teeth? There is not a doubt in the world that hyperplasia of the tonsils, hyperplasia of the other lymphoid tissues of the body, and carious teeth form an unholy trinity—they are bound up together.

Enlargement of the spleen, decay of the teeth, and simple hypertrophy of the tonsils regularly go hand in hand. However, we should not jump at the conclusion that these tonsils are macroscopically inflamed, even in the presence of definite malnutrition and carious teeth; which brings forth the theory that tonsils do definitely combat infection, or at least are highly resistant to it. This particular point will be touched upon later.

While the next thought is not strictly a dental one, it does seem to be sufficiently relevant to merit inclusion here. Now—in cases in which tonsils have been removed because of the occurrence of hemorrhagic nephritis, chorea, heart disease, or rheumatic fever, the result of operative procedures on the tonsils has generally been of benefit to the patient. In such cases, microscopic study of the tonsillar tissues commonly shows chronic infection deep in the tonsil crypts; whereas, on the contrary, in such cases, when the tonsils have been re-

moved merely because they *appeared* to be too large but without other pathologic defect, no infective state has been found deep within the tissue, nor even superficially, except the mere presence of the ordinary mouth bacteria.

Please do not infer from this that an innocent *appearing* bit of tonsil is truly without guilt. That may or may not be the truth. And rather often your conclusion will be erroneous, for the obvious reason that it is an extremely difficult thing to make much more than an approximation of guilt or innocence simply by visual inspection, even if the inspector be exceedingly experienced and clever. The human eye does not greatly resemble an x-ray.

When the tonsils are responsible for depressed systemic conditions, and you are able to do a good piece of exclusion-work—as just suggested—then in all probability removal of the tonsils will result favorably; and as a practicing dental surgeon it would seem to be your duty to suggest that perhaps the tonsils may be at fault for at least part of the condition of carious teeth, and you might recommend that attention be given the tonsils.

#### TESTS ON TONSILS

Some interesting and rather startling experiments have been performed with tonsils, evi-

dently designed to show whether or not they actually do remove particulate matter from the blood stream. In this research, India ink was injected into the carotid artery. This material was excreted through and subsequently definitely located in the tonsils—transported from carotid to tonsil, by such a devious route as to be beyond the scope of this paper. Also experimentation has shown that a slight injury to and infection of the nasal turbinates will show a like bacterial infective condition in the tonsils. There is another matter of transportation for you to consider.

In rickets—to which a vast amount of attention has been given by the dental profession—we find a combination of three pathologic states: an enlarged spleen, caries of the teeth, and non-inflammatory hypertrophy of the tonsils. And it appears to be the consensus of medical opinion, in the light of our present-day information, that all of these conditions are due to deficient diet—both in quantity and quality—or to endocrine disturbances. It is fair to assume that endocrine maladjustment will occur if we do not eat the proper sort of food, in the correct amount.

Furthermore, the fact that familial hypertrophy of the tonsils seems to be accompanied by caries of the teeth

and non-inflammatory increase in the size of the tonsillar bodies, strongly supports the theory that the lymphoid tissues of the tonsil do, in some unknown manner, combat infection.

There are several theories, or forms of a single theory, to account for this action. One of them is that the tonsils constantly produce the materials for the continuous, hidden immunization of the body against infectious diseases that enter the digestive and respiratory tracts. Dental structures form, at least grossly, an important part of the digestive system. Moreover, it does not seem to be entirely reasonable to limit the action of the tonsillar secretions to an effect only upon the digestive and respiratory areas, since a great excess of special lymphocytes, which are said to be formed in the tonsillar cells (the germinal centers, specifically), opsonins, bacteriolysins and other immunizing substances, must likewise penetrate the general organic system, and consequently

would act favorably upon bacterial infection wherever located in the body.

This allegation seems to be corroborated by the fact that sometimes after a tonsillectomy there are increased laryngeal and bronchial irritations, notwithstanding the seeming acceptability of the assertion that these laryngeal and bronchial irritations are of allergic nature, and might well have been in existence prior to the removal of the tonsillar tissue.

Considerable food for conjecture and thought has already been afforded you; yet a major point which I would like to make is that the dental profession would do well to bear in mind that, even with the best of diet, at times there does seem to be rather complete inability to control dental caries—except by removing the tonsils.

This thought is a good one to have ready for use in treating your juvenile case of dental caries. Do not overlook the tonsils, although it does follow that it is permissible to regard them without violent suspicion.

Way-Penn Building  
Waynesboro, Pennsylvania

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### ANNUAL INDEX READY

The index for the 1934 volume of ORAL HYGIENE is now ready for distribution. Copies are sent gratis upon request. Address, Publication Office, 1005 Liberty Avenue, Pittsburgh, Pa.



## Daily Reflections

(Continued from page 341)

"It's a nice place, but I wouldn't want to live here." Can it be possible that a pyorrhea treatment feels as distressing as a wood rasp and a rat tail file feels going under the inferior turbinate into the antrum?

### SATURDAY

There is no such thing as a "minor operation." My breathing—what little there is—is through the mouth; I haven't slept—that wisdom tooth with the entire buccal half decayed away is jumping again; and they call maxillary windows a minor piece of surgery. Incidentally they're calling me a neurotic. May I be struck dead if ever I doubt a patient again when he complains of post-extraction pain!

### SUNDAY

Feeling better. Read the journals. Wrote some of the authors. Wanted to write some others, but the government doesn't permit the type of language I would choose to use to pass through the mails.

### MONDAY

Back in the office, weak and shaky; but I never knew a dental office could be such a beautiful place after an absence of only four days.

Running a cotton exchange to avoid work. Never realized before how lucky we were to

have such a nice tactful way of dismissing patients when we feel so bad.

### TUESDAY

Mrs. Renshaw was told today that she must be hospitalized to have an impacted cuspid removed. Her husband was with her and agreed to pay the fee of \$15 I quoted her. Just another one of the many things accomplished that I have always been told could not be done in a small town. Our population is 790, and me—I'm just another hick dentist.

### WEDNESDAY

Golf. Shot about the same score the rest of you do. Yes, thank you, we have a nice country club. Only ten miles away. But I had no business on it. Nose stopped up again. A few taken straight should soon fix that. \* \* \* It did—and me too! Once more I'll say it—never again!

### THURSDAY

"Mrs. Bowman," I said to the mother of a nine year old girl, "your daughter must drink milk—every day. At least a quart. It won't be long at the rate they're decaying 'till she won't have any teeth." "Well Doc," she answered, "soon 'uz we wean them there calves, Gertie kin have all the milk she wants." All I could answer was "Fine! Fine! That'll be fine!"

## "That's My Collar Button"

*(Continued from page 335)*

gullible, accepted these rascals. It did not take the ordinary layman long to realize that he had been bilked—just as surely as in a "con" game. He resented this fact. He took his revenge in vicious humor directed against all dental practitioners, placing the faker and the conscientious operator in the same category.

During these years ethical practitioners were organizing against the scoundrels. Our lawmakers were induced to legislate against them. Our profession became rigidly controlled. Behind the scenes many great minds were at work. In offices, laboratories, colleges, and clinics, men were devoting all their time and energy to research. They were, and still are, seeking ways to solve the dental problem more efficiently. The watchword of our profession has been progress. Yet, as the proportion of worthless dental service is decreasing, there has been no appreciable drop in the production of pseudo-humorous, derogatory remarks about us. There is an unceasing flow.

I have been accused of taking this matter too seriously. It should be taken seriously! We experience enough trouble and anxiety in earning even the smallest fee. Why should

our efforts meet with derision?

In the writing fraternity there are persons, possessed of a certain type of humor, who can easily and with facility depict the worst calamity as ludicrously as possible. To them nothing is above joking about. With one stroke of their blundering pens, these benighted persons (whose total assets are this depraved sense of humor and the ability to transpose it into prose, verse, or drawings) will belittle all the important achievements. Their sense of good taste is warped.

To my great astonishment, editors whose judgment should be superior, give their official sanction to such gross stupidities and permit them to be published. Recently, even the staidest members of the fourth estate have been guilty of this practice. It is a violation of one of their sternest commandments; that is, never to write evil of anyone who doesn't have access to the same channels for a reply. In justice to all newspapers, periodicals, and publications, we must give editors some benefit of the doubt. We must assume that they are acting unconsciously and without malice. They only weigh material of this sort as far as humor is concerned. They are

not aware of the injury it may do. We cannot condone this practice completely.

The requisites of our profession are such that it demands men who possess diverse talents. Those who desire to join our ranks need some cultural background. Our journals testify to the fact that we have competent writers and artists in our ranks. We could easily produce material which would quite competently poke fun at those who make sport of us. This method might produce some results. On the other hand, it might be conducive to ill feeling and perhaps serve to propel a feudistic movement. We cannot expose our chagrin so plainly; neither can we resort to the extreme measures for which the law provides. We should try to point out calmly that our work is really the fruit of serious effort; that it is a highly scientific achievement. We must make the public cognizant of the years of preparation, the energy and expense involved. Our profession must be viewed in a dignified light, not laughed about.

While we perform dental services in our offices, most of us attempt to educate the patient from a dental point of view. We can easily extend our efforts to include writers and editors and the like. We don't have to drag them into our offices to do this. To the layman any scientific

discussion or lecture, which is the usual part of a dental society meeting, is of no importance. Still, these discussions do not have to be cloaked with the secrecy of the medieval alchemists. I am sure that we would not receive any unfavorable publicity if we threw our scientific meetings open to the press. I believe that a report of the subject discussed, the number in attendance, and the efforts of the members to perfect themselves in the practice of their profession shown at such meetings would react favorably on the public. This method of keeping the public informed constantly and definitely of our activities might serve to change their opinion of the profession. It might even be used as a weapon against the advertiser. When the editors realize the tremendous amount of research work that is going on, they will, of their own accord, check the tide of unfavorable items which they now print.

There is an excellent plan for checking publicity now in operation by the *Bulletin of the Chicago Dental Society*. This bulletin scores each metropolitan newspaper in Chicago every month, as to the number of square inches of favorable or unfavorable publicity printed. No doubt these results are published in some high-minded daily newspaper. This would

be an excellent plan for each dental society journal to follow. We might even supplement this plan. Each of us can become his own scorer. After a certain period, a week or a month, we might write to the editor of our local newspaper or favorite periodical and inform him of the number of unfavorable items printed. Thus, will they all be made aware of the number of persons who took exception to certain articles.

In the past there have been sporadic movements which quickly lost their momentum and died. We can only get action by working together. We may lay ourselves open to criticism. The man who definitely resents a joke on himself is labeled, nowadays, as a poor sport. The smart colloquialism today is "He can't take it!" This seems to be the universal contemporary consensus of opinion. In order not to earn the name of "spoil sport," most of us would rather sit back with a silly grin to cover our hurt, than do something definite about removing the cause. We are lackadaisical. We lack the initiative to put an end to this

fun making at our expense. We want to wait for the other fellow to start things. The Chicago Dental Society started things. We should follow suit.

It is the research worker, toiling away unceasingly, with hardly a thought of any recompense other than the satisfaction of knowing that in the end he is benefiting humanity, who is being sinned against. It is the dental practitioner, who endeavors to put this knowledge to practical use, who is being blasphemed. The efforts of those men who are responsible for the great advances in dentistry deserve more than jokes as their reward. That should be the constant picture in our minds.

We entered the practice of dentistry—in most cases—because we liked it. Our choice should not be ridiculed. We should not place ourselves on pedestals and assume the mien of untouchables; no man, or group of men, can rightly do this. But we should endeavor to stop unthinking persons from casting utterly ridiculous aspersions upon us.

3 Anderson Avenue  
Fairview, New Jersey

## CORRECT ANSWERS TO

# *"Modern Dental Practice"*

(See pages 346 and 347)

1. Patient's teeth should have been extracted before dentist conversed at such close range. This would have prevented the patient biting in self-defense.

2. Fooled you! There's nothing wrong in this picture. This dentist can't resist spilling things on patients' clothes, so he lets them wear his gown.

3. Modern practice dictates pillow and blanket for patient during dentist's unending 'phone conversations. In some instances a small cot in the operating room is advisable.

4. The man in the chair may be employed by the City Scavenger Bureau. If so, a messy cabinet is equivalent to "talking shop," and considered very impolite.

5. Couldn't get this one could you? Well, the patient's taste runs toward Turkish cigarettes, and the stench of vulgar domestic nicotine on the dentist's fingers is rather nauseating.

6. Missing teeth make diction difficult, and educated patients are disgusted by mispronunciation of common words.

7. Used instruments should not be left on the bracket. This woman who had diabetes was forced to find another dentist because she suspected the previous patient of eating gum-drops.

Editor's Note: Can you add to our gallery of errors in "Modern Dental Practice"? If so, send your bright ideas to the Editor, ORAL HYGIENE, 708 Church Street, Evanston, Illinois. Full credit will be given readers whose ideas can be illustrated for publication.

## Around the World by Tooth and Nail

(Continued from page 339)

perspective, the abscessed tooth of Mrs. Jones is forgotten as we philosophically contemplate the world's millions of patients bottled up together on our small, traversable planet, all sharing the liabilities and vicissitudes that beset our kind. Combining our traveler's complex with the perspective of comparative anatomy, we regard the human tooth that serves the peoples of the world today as an end product of long ages of evolution. It developed in our progenitors as a weapon of offense and defense, as a device for tearing and incising, and as an organic tool for domestic habits and real chewing. Now we see the coarse diet of our ancestors replaced by tender cuts of meat, bread, mashed potatoes, and cream puffs. Disputes are no longer settled "by tooth and nail." The grand old historic organ is maladjusted in the climate of civilization: It has become a cause of discomfort, suffering, and health insecurity in all races, peoples, and creeds. It is now a world problem which armies of dentists universally are trained to adjust. The tooth, once a vital aid in the survival of man, now enlists the help of science for its own salvation. Thus raves on the traveler.

In a few days the S. S. *Golden Sun* will blow its whistle and back into San Francisco Bay. Then for twenty-three days it will battle the elements on its way to the Orient. It is a big craft and appears capable of the voyage. The large, blue-eyed Norwegian captain looks a sure match for all the caprices of wind and water. Our cabin is roomy and comfortable, and has two large portholes which would in a pinch accommodate the heads of two sufferers indisposed by sea misery.

If the Pacific Ocean does not belie its name, the overcrowded, militaristic, but beautiful Japan will be the first country to claim our attention. This country is mechanized, socialized, and modernized to a marked degree, and boasts of more dental schools as well as more American-trained dentists than any other Oriental country. We shall expect to see, in the invasion of Western culture which has permeated Japan, the beginnings of familiar dental habits and methods characteristic of America.

Next, barring mishaps, age-old, sprawling, disorganized China will unconsciously reveal itself to us. One-fourth of the

human race is said to live in this huge country which suffers from internal strife, banditry, communism, and civil war. Famine, poverty, and unemployment are on a characteristically Oriental scale. We are told that dentistry in a modern sense exists only in the larger seaboard cities.

Each island in the East Indies is a Mecca for fantastic nature religions, and for what seem to us bizarre and unique customs. We are told that dentists are called upon to stud anterior teeth with jewels. In some places dentists participate in marriage ceremonies by extracting all or every other one of the bride's incisors. The gesture is to relieve the husband of the fear that his wife's love might wander. They, too, consider the tooth a prime organ of sex appeal.

#### WHAT OF INDIA?

Manila and notorious Singapore investigated, our appetite for the unusual will carry us to picturesque Rangoon. In India we will reach the high spot of our trip. As dentist and manicurist we will travel from one mission home to another, thus visting in byway places the most complex and indescribable country of the world. By working half a day and sight-seeing half a day, in the course of a month we can consume

many of the idioms endemic to this vast country.

We have been led by popular organs of public opinion to expect to see a country teeming with natives, bats, monkeys, and insects, and overburdened with disease, humid heat, and filth. Perhaps popular descriptions of India are colored with the Westerner's bewilderment at the complexity of the Far East. Dentistry in India is mixed in with the religious dogma that has shaped all industry and social intercourse. We expect to be surprised by many quaint and strange dental customs. We will try to understand and interpret them.

Among the letters of introduction which we are carrying is one which affords us the privilege of meeting a miniature giant who is internationally famous for his unselfish contributions to the world, and in particular for his courageous struggle for the elevation of the Untouchables of India. Mahatma Gandhi, in his plan for the reorganization of his country, has undoubtedly considered the role that medicine and dentistry should play in the New Deal for India. I am looking forward with the great deal of pleasure to telling you of my interview with this saviour of India.

#### IN PROSPECT

Plans for the rest of our trip are problematical, but we hope

to see Cairo, include a Mediterranean cruise, a European tour, and a visit to bold and progressive Russia. The status of dentistry under the schemes of socialization that have spread all over Europe will be of great interest to us of America because of the pending legislation in the United States. We hope to interview not only the officials who have directed the growth of the various systems but also the average dentists who have profited, or suffered under the system, as the case may be. As leading cities of the world, Berlin, Vienna, Paris, London, and recently recognized Moscow will contribute to my amateur international dental survey.

Our travels completed, two tired Americans will return to their home environs and resume a normal routine in the land of the free and the home of the relatively prosperous. Mrs. Jones' abscessed tooth will again become of paramount importance as we attempt to build

a dental office into an edifice, the overhead of which will prevent footlooseness, excursions, and larks. All this is wishful thinking.

As I terminate this letter, a crew of husky men, with the aid of complicated booms and blocks, is dropping load after load of heavy cargo deep in the belly of the ship. Bales of cotton and scrap iron are being exported in almost all freight boats. The noise has been deafening and distracting, but the freight, not one correspondent, is all important. No crowds will cheer on the dock as we pull out into the bay. So with this note I will wave goodbye to the readers of ORAL HYGIENE, seventy thousand of you, and say, American fashion: "Having a good time. Wish you were here. Love to all."

(To be continued)

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*Editor's Note:* Doctor Phillips may be addressed, care of the Editor, ORAL HYGIENE, 708 Church Street, Evanston, Illinois.

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## NOTICE

It has been brought to our attention that the quotation in the advertisement of Fasteeth, Inc. in our issue of January, 1935 from The American Textbook of Prosthetic Dentistry by Charles R. Turner, D.D.S., M.D., was printed without the consent of Doctor Turner and without the consent of Messrs. Lea & Febiger, of Philadelphia, the owners of the copyright of said book. We regret this occurrence and gladly publish this statement.



# ORAL HYGIENE POLL ON HEALTH INSURANCE

*Total Vote Cast: 5,846*

- |                                                                                                                  | YES  | NO               |
|------------------------------------------------------------------------------------------------------------------|------|------------------|
| 1. Do you favor the principle of Health Insurance?                                                               | 4513 | 1294             |
| 2. Should the service of the Dentist be included as well as the service of the Physician under Health Insurance? | 4432 | 56               |
| 3. What income groups should be included? Those with family incomes BELOW<br>\$1500; \$2000; \$2500; \$3000?     |      | \$1500           |
| 4. Do you favor a LIMITED dental service for insured persons; or an ADEQUATE service?                            | 1138 | 3232             |
|                                                                                                                  |      | Limited Adequate |
| 5. Should ONLY THE WAGE EARNER receive dental care under Health Insurance?                                       | 274  | 3936             |

Or should the wage earner AND ALL MEMBERS OF HIS FAMILY receive such care?

3936 274



W. LINFORD SMITH  
Founder

# ORAL HYGIENE

EDWARD J. RYAN, B.S., D.D.S.  
Editor

Editorial Office: 708 Church Street,  
Evanston, Illinois

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*Give me the liberty to know, to utter, and to  
argue freely according to my conscience, above  
all liberties.* John Milton

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## WHAT MORE THAN 5,000 DENTISTS THINK ABOUT HEALTH INSURANCE

IN January, 1935, a study was made in an attempt to determine in a statistical manner the sentiments and attitudes of the dental profession toward an imminent problem. More than 5,000 dentists representing every state in the Union answered a questionnaire of five questions and mailed their ballots to the editorial office of ORAL HYGIENE.

Specifically, we made this study to determine whether there had been any important shift in thinking from the traditional attitude of the profession against any form of third party practice to the acceptance of the philosophy of health insurance or some other form of third party practice. The study was motivated by an objective curiosity which was aroused by the nonactuarial body of data we had accumulated throughout the past several years from informal correspondence with dentists in various parts of the country. About two years ago we began to notice a rising sentiment in favor of third party practice. In conducting the Health Insurance Poll, we did not set out to prove anything; but rather, to discover.

A national poll of the dental profession on the subject of health insurance should, we believe, reveal any changing

philosophy toward a new method of medical distribution which might be indicative of an enlarging social consciousness or an increasing sense of insecurity produced by the falling off of incomes from private practice. In our opinion the discussion on the subject of health insurance has passed out of the forum of debate to become a pressing and real economic issue as a result of a reduction in income from private practice.

To define the terms of reference in connection with our national poll, we included on the same page on which the ballot was inserted, the definition of Health Insurance as generally accepted and published in the book, *THE WAY OF HEALTH INSURANCE*.

The validity of a sample vote may best be exemplified by recalling the *Literary Digest* Presidential Polls of 1928 and 1932. In 1932 slightly over 3 million persons voted in the *Literary Digest* Poll with the result that before the election of November, 1932, the editors of the *Literary Digest* predicted that the apportionment of votes in the Electoral College would give Roosevelt 474 votes to Hoover's 57. The actual electoral vote in the 1932 election gave Roosevelt 472 and Hoover 59, a shift of two votes out of a total of 531, or an error as compared with the sample vote of less than one-half of one per cent. The sample vote of 3 million was roughly 7.6 per cent of the actual total popular vote of 39,752,662.

According to the statistics of the United States Department of Commerce, the total number of dentists in 1932 in the United States was 64,678. A return in the National Health Insurance Poll among the dental profession of 5,846 ballots means that something over 9 per cent of the profession voted in this poll as compared with 7.6 per cent in the *Literary Digest* Poll.

Furthermore, a vote on a more or less abstract principle, such as health insurance, particularly when there are five separate and distinct questions asked, is more difficult than a sample vote concerning a choice of a person for the office of President of the United States; consequently, fewer returns might have been anticipated.

Whereas the *Literary Digest* ballots were sent individually addressed to citizens, the Health Insurance ballots were post card insertions in ORAL HYGIENE which might or might not be observed in time for the deadline for reply. The *Literary Digest* Poll was open for two months; the Health Insurance Poll was open for about three weeks.

As an interesting side light, it may be observed that the sample vote of 5,846 dentists is slightly more than the number of schedules received from dentists for the compilation on the income of dentists in 1929 made by the American Dental Association in cooperation with the Committee on the Costs of Medical Care. This analysis was based on 5,544 schedules.

The five questions asked on the Health Insurance Poll and the tabulations of the votes on each will be found on page 367 of this issue.

An analysis of these questions, item by item, shows that for the first question regarding the principle of Health Insurance, the vote was 4513 Yes; 1294 No, or a ratio of 11 to 3 in favor of the principle of Health Insurance.

On the second question regarding the inclusion of dental benefits as statutory provisions rather than as additional benefits under Health Insurance, the vote was in favor of inclusion of dental benefits; for inclusion, 4432; against, 56; a ratio of 80 to 1 in favor of including the services of dentists as well as physicians under a health insurance act.

The third question concerning income groups showed a vote definitely in favor of making health insurance available to the economic group with yearly family incomes below \$2,000.

The fourth question, regarding the type of dental care, whether the services should be limited or adequate, received the following vote: 1138 for limited dental service; 3232 for adequate dental service; a ratio of 3 to 1 in favor of adequate care.

The fifth question which asked whether only the wage earner should receive dental care or the wage earner and all members of his family drew a vote that was overwhelmingly in favor of including the family: There were only

274 who voted in favor of dental care for only the wage earner: whereas 3936 voted in favor of dental care for the wage earner and all his family: a ratio of 14 to 1 for complete family coverage.

The space allowed for remarks on the ballots gave the opportunity for many and varied and significant expressions of opinion. The seriousness with which the problem was considered by the voters is indicated by the fact that flippant or scurrilous remarks or the comments of cranks and crack-pots were made on only five ballots. It is a credit to the dental profession that the answers to the questions were given in a dignified, accurate manner with several dozen voters expressing their thanks for the opportunity to state their opinions on the subject. The Health Insurance Poll did not indicate any significant geographic distinctions in the response.

Among the hundreds of remarks, several appeared repeatedly. Outstanding among these were:

1. Something should be done now: immediate action of some type which would bring the producer and consumer of medical services together was urgent.

2. Particularly on ballots from New York and the west coast there was a frequent statement that health insurance was not enough and that out and out socialization of medical care was the only satisfactory answer to the problem from the standpoints of the public and the profession; in other words, that medical care should be bought and paid for from tax funds rather than from insurance funds.

3. Many voters cast their ballots in the affirmative on the principle of health insurance, but although they favored the principle, they were fearful of possible political domination and control.

4. Other voters in favor of the principle insisted that reasonable fees and the maintenance of professional standards should be guaranteed before the adoption of any definite plan.

5. Conspicuous among the remarks of those who voted against the insurance principle was the plaintive echo that health care should not be socialized or, in fact, that no

change in the distributive method of supplying care should be made until there was some form of socialization adopted in supplying the essentials of food, clothing, and shelter.

6. Some who voted against the health insurance principle nevertheless admitted that they felt that some form of socialization was inevitable.

7. There were numerous qualifications and conditions made by affirmative voters. Among these was the statement that with the change in the method of payment for services there was to be no change in the method of dispensing the service; especially that pay clinics were not to supplant the private office practice.

8. Some felt that a health insurance plan comparable to our educational system should be effected only for children; others believed a plan should be adopted only for American citizens.

9. Along with the expressions of fear of encroachment on the professional values by politics there was also the recurring warning to keep private insurance companies from benefiting by a health insurance plan.

10. A few were afraid that individual initiative would be destroyed although they voted in the affirmative and a greater number seemed to think that the elimination of advertising dentists would be accomplished.



"I do not agree with anything you say, but  
will fight to the death for your right to say it."

—Voltaire

## ANOTHER REMEDY

The sleepless nights you refer to in your December editorial<sup>1</sup> and the headaches of the private dentist, physician, or nurse as they listen to the propaganda for socialization of these professions can be cured almost over night, if these professions will embark on the following program.

First: Let every local society meet and pass the following resolution, a copy of which is to be sent to the state and national organization:

"Resolved, that we, the dentists of (physicians of) \_\_\_\_\_ District hereby pledge to ourselves and to each other that, whenever socialized dental service shall have become an accomplished fact, we will work unceasingly among our patients to accomplish the socialization of the banks, insurance companies, public utilities, and industrial enterprises from which our patients derive their means of subsistence.

"Second: To accomplish the purposes of this resolution we demand

<sup>1</sup>Wheels of Propaganda, Editorial, ORAL HYGIENE 24:1776 (December) 1934.

that our local, state, and national officers appoint committees to organize the details of concerted propaganda to be used by our profession in contacting our patients."

It will be easily seen that the patient has the utmost confidence in his physician or dentist and that one word from him bears more weight than many radio addresses. As we see virtually all the population every year or two, it is not hard to envision what effect we could have if we made the concerted drive.—WILLIAM E. WALTON, D.D.S., 100 North Centre Street, Pottsville, Pennsylvania.

## DENTAL FEES

Frequently, industrial injuries respond so slowly to treatment that the physician in charge refers the patient for dental diagnosis and treatment. Discovery of infection and treatment therefore, as we so often find, tends toward earlier discharge of the patient and his return to duty.

Now here is the problem: the physician is employed by the in-

surance company for the treatment of these employees and is remunerated by the insurance company. If, in the course of treatment, the patient, who is slow to recuperate, is found to be luetic, the insurance company will pay for this treatment even though the case is referred to another physician. On the other hand, the dentist is left "holding the bag." He cannot conscientiously refuse to render aid; yet, while his services will reduce the number of visits by the patient to the physician or otolaryngologist (they are paid on a per visit basis), the dentist's bill is not considered.

Is dentistry a rubber sword—stretching in one sense to suit the welfare of the human being and in the other reacting to a mechanical status after rendering service? I say that the latter premise is without logic, and believe you will agree with me that this is an unfair situation deserving of proper adjustment. But how?—J. JAC BANGEL, D.D.S., *Portsmouth, Virginia.*

#### COLLECTING ACCOUNTS

Please permit me to make a few comments re: collecting dental accounts.

In the article in ORAL HYGIENE on collections by I. H. Kline,<sup>2</sup> I note that he does not seem to understand the special condition existing in collecting dental bills. He suggested investigating the prospective patient's credit status through banks, lawyers, stores, and so on. Doctor Kline does not seem to know that a patient will pay such bills but will not pay his dentist. He will even pay his physician, but the dentist must wait. Why? He wants that very physician in case of illness. The dentist is con-

sidered in the light of a plumber, only a mechanical necessity. Many, very many dentists have told me that even persons of high moral standards think it is not a sin to beat the dentist. I have found this to be a fact.

Several lawyers have told me and other dentists that dental bills are the hardest to collect. In fact, at a dental meeting some time ago, a prominent lawyer gave us this opinion.—W. P. TABER, D.M.D., 9224 *Foster Road, Portland, Oregon.*

#### WHEAT AND DENTAL CARIES

Much has been said about lactic acid causing dissolution of enamel structure, while other possible acids have not been so considered.

I believe it is well to consider other acids which are likely to be formed in mouths in which wheat products are allowed to collect.

Wheat flour particularly is a combination of starch and gluten—gluten comprising about 30 per cent of the flour. Gluten is composed of two distinct proteins, glutenin and gliadin. When gliadin is hydrolyzed it is converted into glutamic acid,  $C_5H_9NO_4$ , a dibasic acid. Gliadin yields about 43 per cent of this acid. While hydrolysis is taking place within the gliadin, the protein substance of the enamel is also affected, the inorganic substance of the enamel being released and caries resulting.

Wheat products, particularly bread, due to the adhesiveness of the gluten adhere to the enamel in convenient areas. Even after a good home cleaning of the teeth, it is possible to find this glutinous substance together with starch remaining in secluded areas. All other foods in which flour is not used are seldom found adhering to the teeth.

However, in some mouths where

<sup>2</sup>Kline, I. H.: An Ounce of Prevention or a Pound of Cure. ORAL HYGIENE 24:1782 (December) 1934.



the teeth are cleaned infrequently, if ever, caries are uncommon, due to well arranged teeth and proper masticatory functions or to a protective greasy film upon the surfaces of the teeth.

Those who consume large quantities of fats and oils are not so frequently affected with caries, as these substances form a greasy film upon the teeth which prevents gluten from adhering.

As we cannot do without wheat in our daily menu, we must either consume plenty of fats or follow up with a good dental hygiene.—EDWIN W. NIEDERHOFER, D.D.S., 1 Findlay Street, Cincinnati, Ohio.

#### THOUSANDS OF WEARABLE IDLE DENTURES

Many lower dentures are peacefully reposing within the confines of the proverbial top bureau drawer simply because of indifference to the use of denture powder. The denture biting stress of fifteen to twenty-five pounds is just that much in excess of Nature's requirements. Nature never intended that her thin gum tissue should be smothered, pinched, and squeezed between hard bone and harder vulcanite or metal.

Regardless of perfect denture adaptation, denture powders serve best as stress-breaking, shock-absorbing pads, and the emphasis by the manufacturers on the adhesive property of such powders is the worst sort of bad psychology.

Dentists often hesitate to prescribe denture powders as they are commercially supplied with the bold notation on the container, "holds dentures firmly in place," because of fear that it might reflect unfavorably upon their prosthetic

ability. It is evident that the gum tissue of patients who use powder is usually more of a normal pink in color, and pinkness is the barometer of gum tissue health.

In recommending denture powder the dentist should place adhesiveness last on the list—or forget it entirely.—HERBERT ELY WILLIAMS, D.D.S., Red Bank, New Jersey.

#### WISCONSIN LAW

Because the members of the dental profession throughout the country might make the wrong interpretation of the recent Wisconsin Supreme Court decision on dental advertising, I am sending this statement on the changes made by that decision.

The new Wisconsin Dental Law itself was upheld by our high court. That law provided that the Dental Board shall make reasonable rules, by-laws, and regulations. This feature was attacked by advertising dentists. The only rules of the by-laws that were not upheld were two that related to dental signs. According to the Supreme Court ruling dental signs may be located at places other than the office itself, but must be purely educational matter. The other point on which the court ruled against the Board was in the statement that dental signs could also contain, besides the name of the dentist and his office hours, purely educational matter. All other rules in the by-laws were upheld, so the dental profession in Wisconsin feels that a mighty good job was done. We thought you might like to have this explanation for ORAL HYGIENE.—S. F. DONOVAN, D.D.S., Secretary, Wisconsin State Board of Examiners, Tomah, Wisconsin.



## Ask **ORAL HYGIENE**

Please communicate directly with the Department Editors, V. CLYDE SMEDLEY, D.D.S., and GEORGE R. WARNER, M.D., D.D.S., 1206 Republic Building, Denver, Colorado. Please enclose postage. Material of interest will be published.

### **PYORRHEA**

**Q.**—One of my patients, a married woman of 35, who is in good health, has a stubborn case of pyorrhea. Her mouth is very clean. I have inserted many gold inlays (two surface), ground occlusion to relieve traumatic occlusion. I have given her a prophylaxis, have massaged and syringed the pockets, scaled and polished the teeth, and have to date used the following solutions—iodine, 5 and 10 per cent chromic acid, methylene blue (methylthionine chloride, U.S.P.), gentian violet, sodium perborate. Upon pressure, pus still oozes out, especially in the morning. Lately her teeth are becoming more sensitive, which I attribute to the chromic acid. I have given her over eighteen treatments, and while there is improvement, there is still considerable pus. Can you suggest any treatment?—H.B.S., Ohio.

**A.**—The usual and safe procedure in diagnosis and treatment of a case of pyorrhea is to secure first a complete set of intra-oral roentgenograms. An intelligent reading of these roentgenograms will, if there are no systemic complications,

give one a fairly definite idea of the prognosis.

In addition to this, one should test the teeth for mobility, occlusion, and amount of subgingival pus as well as depth, position, and shape of pockets. If bifurcations are involved the tooth is usually in a hopeless condition and definitely so in the case of maxillary molars. If the pockets are funnel shaped, the condition is more serious than in the horizontal type. If the roots are short and pointed and freely movable, the prognosis is bad. If the bone mineralization is poor, the outlook is not hopeful. In blood dyscrasias, such as leukemia, or in diabetes mellitus the condition assumes a most unfavorable aspect. Most specialists depend locally almost wholly on surgical treatment; that is, the thorough subgingival curettage and polishing and in certain cases some type of gingivectomy. Systemic treatment is largely dependent on a prop-

er diet, plenty of water, and good elimination.

The foregoing is about all I could say in the abstract. If you will send me a complete set of good roentgenograms I will interpret them for you to the best of my ability.—GEORGE R. WARNER

### COURSE OF EMBOLUS

Q.—On page 1162 of the August issue of *ORAL HYGIENE*<sup>1</sup> you state that it is entirely possible for an embolus in any field of operation to be the cause of a cerebral involvement. This statement has puzzled me many times, and I would like to have an explanation of the course of this embolus.

My study of anatomy and physiology has led me to believe that blood in the peripheral circulation must pass through the right heart and then through the capillary network of the lungs, before it can reach the left heart to be pumped to the head or general circulation, unless there is a patent foramen ovale.

It seems to me that an embolus from the peripheral circulation would cause an infarction of the lung, unless it was small enough to pass through the capillary network, in which case I fail to see why it would lodge in the capillaries of the brain; however, if such a septic embolus lodged at the brain, it would be microscopic in size and I am wondering how it would be possible to make such a diagnosis.—C.G.R., Ohio.

A.—Your question in regard to emboli is pertinent and well expressed but one that is hard

to answer in the limitations of a letter.

You are right in assuming that emboli that would lodge in the arteries of the brain would be likely to lodge in the lung. Cases in which fat emboli are released in some numbers, for instance in a bone fracture, will show a simultaneous hemiplegia and pneumonia.

Large emboli do sometimes, as you have argued, pass through a patent foramen ovale.

Emboli not infrequently originate in the heart and of course sometimes in the left side; in which case the embolus or emboli could easily lodge in the regions of the fissure of Sylvius, a favorite location for them.—GEORGE R. WARNER

### EDENTULOUS MAXILLA

Q.—I have a patient, a woman of 40, with an edentulous upper maxilla. The alveolar process seems to be almost entirely destroyed under the gum tissue over the entire arch, and the tissue hangs down like a movable curtain. She has worn full dentures for many years. What is the cause of this condition? What procedure do you advise?—M.J.O., New York.

A.—The cause is probably a lack of mineralization or possibly a residual infection in the alveolar process and trauma from an ill-fitting denture or from faulty occlusion.

I would advise, first, that you take roentgenograms to determine the presence of infection and density of the bone. I would decide from a study of

<sup>1</sup> W.R.B.: Septic Cerebral Embolus, *Oral Hygiene* In *Ask Oral Hygiene* department 24:1162 (August) 1934.

the roentgenograms and the condition and position of the tissue in the mouth whether or not an operation should be performed. If not, I would try to get an impression without displacing the movable curtain of tissue and one that will direct the pressure of the denture against the part of the mouth that looks as though it could best stand pressure. You should then arrange the teeth with a balanced occlusion, if possible, with a minimum of occlusal area.—V. C. SMEDLEY

### SWELLINGS

Q.—When do you advise heat and when cold applications for swellings of the face?—C.A.L., Massachusetts.

A.—Cold is applied to the face immediately following a severe extraction, and cold applications should be continued for two or three hours if there is no swelling and longer, up to twelve hours, if there is swelling. Following this stage, alternate heat and cold should be applied for a few hours. If the swelling then continues and especially if there is a hard zone in the swollen area, hot moist applications should be used until the hard area softens and disappears or breaks down and suppurates.—GEORGE R. WARNER

### LOSS OF VISION

Q.—I have a puzzling case. About a month ago, I extracted the upper right central and lateral for a patient, a man of 63. Both teeth were abscessed. Coincident with the ex-

traction of the central, the patient told me he saw a flash of light in his right eye. The next day he could scarcely see out of it. Yesterday he said that he was almost blind in that eye because a kind of haze passes over it, at certain times. His sight is normal otherwise, but once this film, or whatever it is, begins to cover the eye he can scarcely see at all.

I have asked some prominent physicians of this city what could have caused it, and they do not know. The one I thought might diagnose it correctly told me he thought it purely a psychological condition. I cannot agree with him, but as I know of no connection between the optic nerve and anterior dental, I cannot account for it. I used procain for injection, and the extraction was painless. Have you ever heard or read of a similar case?—R.A.S., Florida.

A.—After considerable thought and consultation we have not been able to discover a way in which vision could be lost immediately because of a tooth extraction.—GEORGE R. WARNER

### ALOPECIA AREATA

Q.—I am sending you the facts about a case of alopecia areata. The specialist in charge of this case suggests that the cause of the condition may be the extraction of an upper right second bicuspid that I removed on February 17, 1934. This tooth was healthy, but I extracted it because it was serving no purpose since it was lying lingually and between the first bicuspid and first molar in a crowded condition. I extracted it with ease using procain infiltration, about 2 cc.

On July first the patient noticed that the whiskers stopped growing on each side beneath the chin. A

skin specialist prescribed arsenic injections and phenobarbital, diagnosing the condition as alopecia areata due to nerve lesions possibly caused by the extraction of the tooth.

The patient did not improve. In fact the condition spread over his entire face leaving it devoid of whiskers. Later front of thighs and legs but not the backs lost all hair. Still later the patient began to become bald at back of his head. His forehead had been bald for past ten years.

The patient has had two dental roentgenograms taken during the last year. Several years ago he had extensive abdominal roentgenograms made. It is believed that dermatitis caused by roentgen rays can be ruled out.

Have you ever heard of a patient losing his hair due to nerve lesions caused by the extraction of a tooth? —P.L.D., New York.

**A.**—I am glad to say that I have had the experience of assisting in clearing up one case of alopecia areata. A young fellow, presumably in the best of health, only about 21, suddenly developed this malady on the scalp and particularly in the occipital and suboccipital regions. After some months of unsuccessful treatment we decided to remove some impacted third molars. The impacted third molars were removed; the scalp immediately cleared up; and the condition has never reappeared, although nearly five years have elapsed since the impacted third molars were removed.

While I am not ready to say what the cause may be in your case, I feel certain that it did not occur because of the remov-

al of the malpositioned maxillary second bicuspid. In the light of our experience I would think it advisable to clear up all infection in the mouth as I understand that there is evidence of subgingival deposits which of course are the source of subgingival infection. If there are any impacted third molars, it would not be out of line to have them removed.

I shall be much interested in hearing what the outcome of this case is.—GEORGE R. WARNER

### CHECKING MILK FLOW

**Q.**—Would the extraction of teeth have any effect on the flow of milk? I have a patient, a woman, who had two teeth extracted, about six weeks after her baby was born, when she had an abundant supply of milk. The dentist who extracted the teeth told her the procain would affect the baby and advised her to have the teeth extracted without any local or general anesthetic. Hence the lactation was checked, and she was forced to put the baby on a bottle. —J.H.W., South Dakota.

**A.** From my experience as a dentist and from the experience of obstetricians it may be said that extraction of teeth per se should not interfere for more than twenty-four hours with lactation in a normal woman nursing a baby. Shock, of an emotional type, or even ordinary physical shock, sometimes affects the flow of milk for a few hours.

The cause in the case you describe might have been an emotional shock coincident with a stoppage of free flow of

milk which may occur at any time; or it might have been a pure coincidence.

The procain should have had no ill effect on either mother or baby.—GEORGE R. WARNER

### DIET DEFICIENCY

Q.—I have a patient, a boy 6½, weight 55 pounds; normal in size, mentality, and frame; has been subject to nervous disorders since birth; has a fear complex; namely, fears cats, snakes, and any pain; general physical condition, below normal; diet: virtually no sweets; two or three oranges daily; very few vegetables; all varieties of meat; plenty of water; one quart or more of milk daily; no coffee or tea; takes oil every day to aid elimination; the buccal and labial surfaces of his teeth are already decayed; there is definite hypoplasia of gingival third of all erupted permanent teeth which seems to correspond with high temperature during attacks of measles and whooping cough; the deciduous teeth are inferior requiring many restorations; teeth receive good care; has taken viosterol until recently when a physician put him on concentrated capsules containing vitamins A, B, and D; took milk of magnesia daily for first two years.

From the information I have given, can you tell me if this child has a dietary deficiency and, if so, what it may be?

Due to his neurotic condition he has always been a problem child and has been under the care of a physician continually.

From the dentist's point of view I believe the child lacks something that can be given it, although the physician told the mother that "his teeth were all right for his age"—L.F.M., Maryland.

A.—It is impossible to judge from the age of your patient whether his weight is normal; it depends upon height and race. The fact that he has been subject to nervous disorders since birth would indicate perhaps a tendency to chorea and as far as that phase of the subject is concerned it would be a wise procedure for the mother to take the child to a competent psychiatrist. It frequently happens that a great deal can be done in such cases in the way of home management if the control is in the hands of a competent person.

The hypoplastic enamel cannot be corrected, but the large amount of decay present indicates something deficient in the metabolism or an inherited tendency to dental caries. We have both of those factors to consider in these cases. From the short dietary list which you include I would say that it is fairly good, although deficient in the matter of bulk, and of course bulk is best obtained by the leafy vegetables and fruit.

—GEORGE R. WARNER

### IMPRESSION TECHNIQUE

Q.—If you saw two full upper impressions; one, full plaster; the other compound with plaster, of equal merit apparently, which would you use?

My reason for asking this is that while I learned the compound plaster technique I thought I could do equally as well with full plaster and now have been using it for ten years with good results and a saving of time. I have, for almost an equal length of time, been trying to justi-

fy myself for doing it purely from a scientific point of view and not on the basis of results, but am thus far at a standstill. I hear men argue that I don't get any compression. When is compression indicated in an impression? Certainly not in a soft flabby case; and in a hard firm case the compression would be virtually nil.

A dental man has just been traveling through this state demonstrating a full compound technique adding a tracing stick to labial and lingual flanges, and in an upper—the posterior third of the palate. Of course he obtained excellent results in the good mouth he had, and he obtained compression in areas added to by the stick. I would appreciate it if you would advise me on this.

Almost any clinician will tell you to use the method that works best in your own hands. While I have always thought I could take a fine impression, I would enjoy having an alibi for this much condemned full plaster technique, if there is one.—C.C.H., Florida.

A.—It is my opinion that in impression making the material and the technique used should vary with the mouth conditions; that is, I would say that, in a "green" mouth or soon after extractions, there is nothing better than a plaster impression and in a uniformly hard well formed mouth certainly a satisfactory plate can be made from a good plaster impression. In a mouth that is uniformly soft and flabby, if there are any such, perhaps straight very soft plaster should be the material of choice.

However, in the type of mouths that I encounter in the majority of my patients where

there are both soft and hard areas and especially where adsorption has been excessive in the anterior part of the mouth, I think a combination of compound and plaster is ideal. For such mouths I prefer to adapt compound across the heel and along the ridge areas as far as the tissue is firm. If the tuberosity or any other area is flabby, cut out the compound to provide for some bulk of plaster and leave the anterior portion of the tray empty for plaster, unless flabby tissue needs labial support to prevent it from bending outward and upward as the impression is taken. In this case place a little compound labially but not occlusally in this position before inserting the plaster. Cut a hole about the size of a No. 10 bur in the anterior part of the vault of the tray for the escape of plaster to prevent compression of the flabby tissue and pressure on the hard area in the center of the vault by confined plaster. Hold the tray seated under quite heavy pressure until the plaster is set.

You ask which I would select as between a full plaster and a plaster and compound impression that looked equally perfect. I do not believe I would be capable of making this choice, unless I could examine the mouth in conjunction with the impressions, and in this case I might discard them both if it should appear that they were both taken without previous careful consideration of the conditions in the individual mouth.—V. C. SMEDLEY



## DENTAL CARIES PERIL TO HEALTH

No more important task faces the world of science today than that of finding a method to prevent tooth decay. Such is the opinion of Doctor John Oppie McCall, director of the Guggenheim Dental Clinic of New York.

Speaking before the recent meeting of the American Association for the Advancement of Science in Pittsburgh, Doctor McCall declared that over 95 per cent of the population of America suffer from tooth decay and added that, "it is not difficult to demonstrate that uncurbed dental decay is a common, perhaps an invariable cause of ill health."

Particularly alarming, according to Doctor McCall, is the fact that dental decay is now beginning to appear in younger children. "Figures indicate," he said, "that about half the two year old children in our larger cities have at least one cavity. The percentage affected and the number of cavities per child increase rapidly throughout the pre-school period."

A hopeful sign, Doctor McCall indicated, is that medical men have now begun to realize that the solution of the dental decay problem may likewise solve many problems

of general health and even problems of mental hygiene.

The relationship between nutritional deficiencies and dental decay has been emphasized by a number of investigators. "So close is this relationship," Doctor McCall said, "that it may safely be stated that the teeth constitute the most delicate and reliable index as to physiological balance, especially in childhood."

"Martha Jones, who has for many years conducted researches in this field, emphasizes chiefly the acid-alkali balance as being in her opinion the most important single item in a dietary program. Significant aspects of her work have been the benefits in general health and the reduction in infant mortality which were concomitant with improvement in the dental condition of the children with whom she has worked."

## ONE SHOT DROPS TWO DEER

Two deer to a shot is the all-time hunting record hung up by a Concord, North Carolina, dentist this season.

Doctor Hubert B. Sapp, while hunting in Pisgan national forest, leveled down at a range of 150 yards upon a large doe. The bullet



felled its original target passing through the deer's neck, and entered the head of a smaller doe, also killing the second animal, which was completely out of the hunter's line of vision.

### TRACES HISTORY OF DENTAL DISEASE

There is nothing modern about pyorrhea and dental decay. Discovery of an ancient skeleton in Korea has convinced Doctor John L. Boots that Korean Chinese also suf-

fered from these diseases 1700 years ago.

In an address before the last meeting of the American College of Dentists, Doctor Boots, of Severance Union Medical College, Seoul, Korea, told dentists that the remains were found in the tomb of a provincial governor and his wife near Pyengyang. He said his study of the skeleton's teeth which were badly worn led him to believe that this ancient woman ate rich foods that were hard on her teeth, including grain pounded in stone mortars.

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### DENTAL MEETING DATES

Joint Meeting of the Montefiore Hospital Dental Department and the Tufts Dental Club of New York, Thursday, March 7, Montefiore Hospital, 8:30 P. M.

The Thomas P. Hinman Mid-Winter Clinic, Atlanta Biltmore Hotel, Atlanta, Georgia, March 18-19.

Five State Post Graduate Clinic, Washington, D. C., March 18-20.

American Society for the Advancement of General Anesthesia in Dentistry, next regular meeting, Fraternity Club, 22 East 38th Street, New York City, March 25.

Alabama Dental Association, 66th Annual Meeting, Tutwiler Hotel, Birmingham, Alabama, April 16-18.

Mississippi Dental Association, Annual Meeting, Robert E. Lee Hotel, Jackson, April 22-24, 1935.

New Jersey State Dental Society, 65th Annual Meeting, Ambassador Hotel, Atlantic City, New Jersey, April 24-26.

The Old Dominion Dental Society, 22nd Annual Convention, April 25-26, Richmond, Virginia.

American Board of Orthodontia Meeting, Waldorf Astoria Hotel, New York City, April 29.

Massachusetts Dental Society, annual meeting, Hotel Statler, Boston, April 29-May 2. William Hayes Hoyt, D.D.S., 77 Newbury Street, Boston, President; Philip E. Adams, D.D.S., 106 Marlborough Street, Boston, Secretary.

Pennsylvania State Dental Association, Annual Meeting, Altoona, Pennsylvania, May 7-9.

*(Continued on next page)*

Georgia Dental Association, 67th Annual Meeting, Ansley Hotel, Atlanta, May 12-15, 1935.

Illinois State Dental Society, 71st Annual Meeting, Quincy, Illinois, May 14-16, 1935.

Tennessee State Dental Association, 68th Annual Meeting, Hermitage Hotel, Nashville, May 14-16, 1935.

Board of Dental Examiners of California, next examination, San Francisco, commencing May 27; in Los Angeles, commencing June 24. For complete information write to Kenneth I. Nesbit, D.D.S., 450 McAllister Street, San Francisco.

Northeastern Dental Society, 22nd annual meeting, New Ocean House, Swampscott, Massachusetts, June 10-12.

New York State Dental Hygienists' Association, 15th Annual Meeting, Hotel Saranac, Saranac, New York, June 12-15.

The Dental Society of the State of New York, 67th Annual Meeting, Saranac Inn, Upper Saranac, New York, June 12-15, 1935.

The State Board of Registration and Examination in Dentistry of New Jersey will hold its annual examinations in Trenton, commencing June 24. For complete information write to John C. Forsyth, Secretary, 148 West State Street, Trenton, New Jersey.

The Examination for licenses to practice Dentistry and Dental Hygiene in Florida will be held in Jacksonville, June 24-29. For information and application blanks address H. B. Pattishall, D.D.S., 351 St. James Building, Jacksonville.

American Dental Society of Europe, Annual Meeting, London, England, July 31 to August 3, 1935.

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### SKELETON FOUND IN NEW YORK

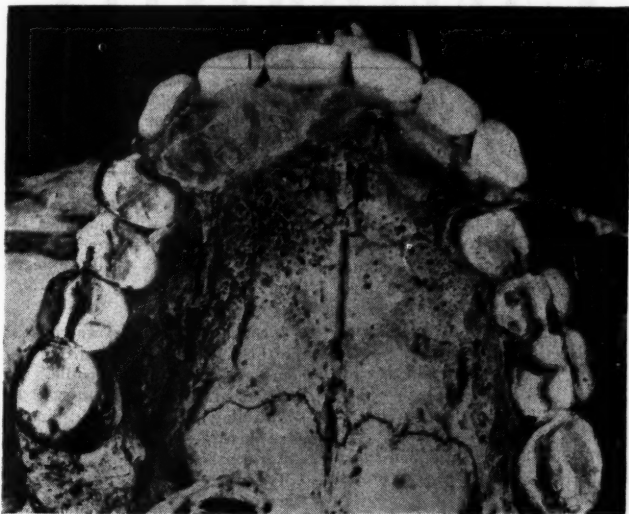
Authorities are seeking to identify the skeleton of a man which was found about October 15, 1934, near Bald Mountain, in the northern part of Herkimer County, New York. All indications pointed to the fact that it had been there several months.

The accompanying photographs are of the upper and lower jaws of the skeleton, and the following dental description has been furnished by Doctor Fred A. Garvin, of Oneida, New York:

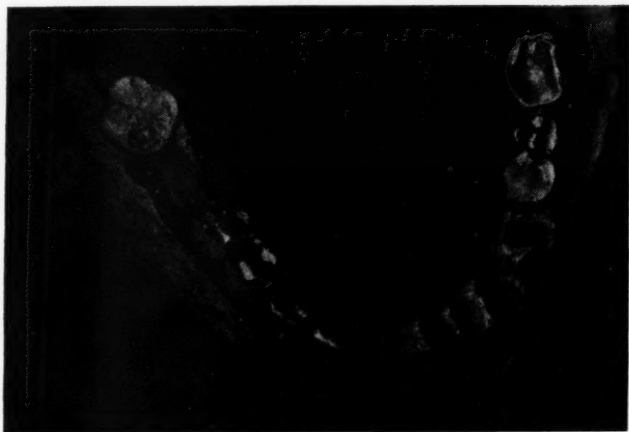
Upper Right: Second molar, gold crown acting as abutment for cantilever bridge; second bicuspid, normal; first bicuspid, platinum crown; six anterior teeth missing (some post-mortem loss.) Upper left: Four tooth bridge from second molar to first bicuspid. Abutment pieces appear to be made of platinum (Fig. 1).

Lower Right: Fixed bridge with double abutment (gold crown on cuspid and first bicuspid) carrying two bicuspid pontics. Lower left: cantilever molar bridge (Fig. 2).

Dentists are urged to check this data against their records and, if they have any information, to address Stephen McGrath, Captain, New York State Troopers, Oneida, New York.



*Fig. 1*



*Fig. 2*

# LAFFODONTIA



*If you have a story that appeals to you as funny, send it in to the editor. He MAY print it—but he won't send it back.*

Young Man (at dance): "See that girl over there? She's a very stylish dresser. She changes her clothes sometimes four or five times a day."

Friend: "That's nothing. I've got a sister who changes her clothes ten or twelve times a day."

Young Man: "How old is this sister?"

Friend: "Six months."

"Did you know that I had taken up short story writing as a profession?"

"Sold anything?"

"Yes. My watch, my piano, and my overcoat."

Best Man (just after wedding): "Why do you look so worried?"

Groom: "I don't like the way the bride smiled when she promised to obey me."

Local Youth: "I'm going to see the doctor the first thing in the morning."

Friend: "Who? The one who took your tonsils out last week?"

Local Youth: "No, the one who took my sweetie out last night."

Father: "Now, Junior, I want to put a little scientific question to you. When the kettle boils why does steam come out of the spout?"

Junior: "So mother can open your letters before you get them."

"Let's get our wives together tonight and have a big evening."

"O.K., but where shall we leave them?"

A commercial traveler who missed the bus found himself with two hours to spend in Brushville. He approached an ancient porter:

Traveling Man: "Got a picture show here?"

Porter: "No."

Traveling Man: "A pool room or library?"

Porter: "No."

Traveling Man: "Well, how on earth do you amuse yourselves?"

Porter: "We goes down to the grocery store in the evenings. They have a new bacon slicer."

A dinner guest in a Virginia home was telling his host how to prepare ham that would be even better than the famous Virginia ham.

Guest: "Place the ham in a deep pan and the first day soak it in a bottle of rye whiskey and let it cook awhile. The second day, add a bottle of Jamaica rum; and the third day, a bottle of port wine. The fourth day, pour in a bottle of Bourbon."

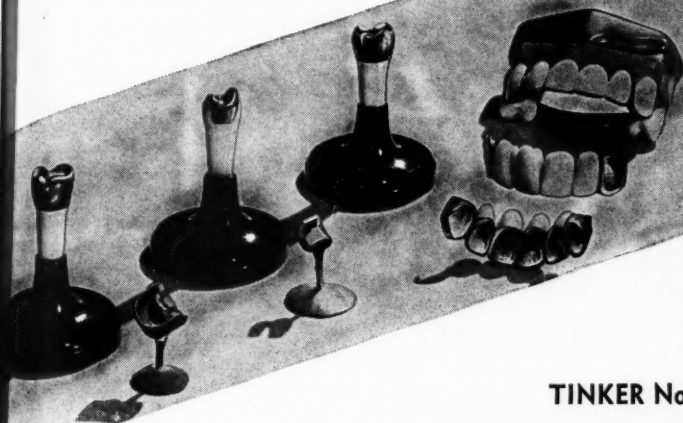
Host (turning to the colored cook): "What do you think of that?"

Negro Cook: "Ah don't know 'bout de ham, but it sho' sounds like mighty fine gravy."

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Ziratul, according to a great many members of the dental profession, most nearly meets all the requirements of an ideal corroborant. It has proved its efficacy to

thousands of dentists throughout the country, both in general operative work and in the treatment of pathologic conditions of the gums.

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